



# Decompensated Liver Failure in a Post-Partum Patient with Hepatitis C-related liver cirrhosis: Balancing on a thin line



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## INTRODUCTION

Decompensated liver cirrhosis is a common reason for admission to intensive care units, often with high mortality rates. However, pregnancy among cirrhotic patients is rare, carrying a significant risk for variceal bleeding and acute decompensation, leading to adverse maternal and fetal outcomes.

*Keywords: postpartum liver failure, hepatitis c liver cirrhosis*



## CASE REPORT

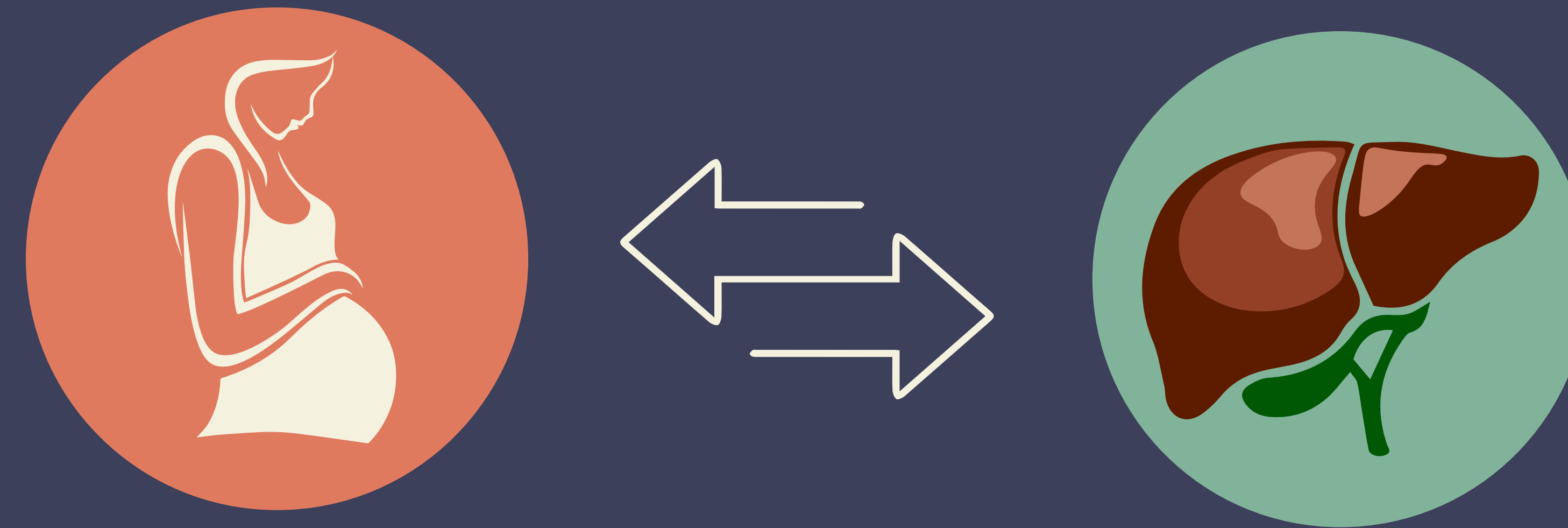
This is a case of a 38-year-old female multigravid at 34 weeks gestation, with known liver cirrhosis secondary to chronic hepatitis C, admitted for observation due to short cervix on ultrasound.

## CLINICAL COURSE

Workup on admission revealed anemia (Hgb 8.9 mg/dL) and thrombocytopenia (platelet 126,000 mm/mL), with mildly elevated transaminases (ALT 60 U/L, AST 65 U/L), altered synthetic liver function (low albumin 2.7 g/dL) but normal bilirubins and INR. She underwent an emergency cesarean section due to non-reassuring fetal status and had a delivery of a 2.1 kgs preterm baby with an APGAR score 7-8.

However, postoperatively, she presented with hematemesis and hypotension. She was transferred to the intensive care unit, where she developed overt hepatic dysfunction with AST 2,260 U/L and ALT 3,388 U/L. Other workup showed hyperbilirubinemia, leukocytosis, thrombocytopenia, and prolonged INR. In addition, she developed metabolic acidosis, eventually requiring hemodialysis. Esophagogastroduodenoscopy revealed portal hypertensive gastropathy and tortuous esophageal varices to which rubber band ligation was performed.

Despite maximal supportive medical management, she had decreasing sensorium and shock. She was intubated requiring four vasopressors. Her clinical status progressively declined post-delivery as she developed worsening liver failure and grade IV encephalopathy. Finally, the patient expired on the 3rd postoperative day due to hepatorenal failure.



**Pregnant women with liver cirrhosis** should be closely monitored due to **risk for maternal and fetal morbidity and mortality.**

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## CONCLUSION

Pregnant women with hepatic cirrhosis have altered reproductive hormone levels and deranged systemic physiology. It is recommended that known cirrhotic patients, regardless of etiology, be appropriately assessed and managed before any planned pregnancy.

The decision for cirrhotic patients to become pregnant should be a balanced family decision with a multidisciplinary team. Further studies are needed to develop protocols for prevention, prognostication, and management of postpartum liver failure as current data are limited.

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